Never insert or remove a SIM card while the alarm is powered on

868Mhz GSM Wireless Security System

Gamma 7

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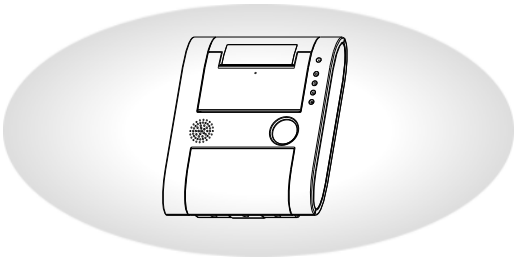
Wireless Security Alarm System

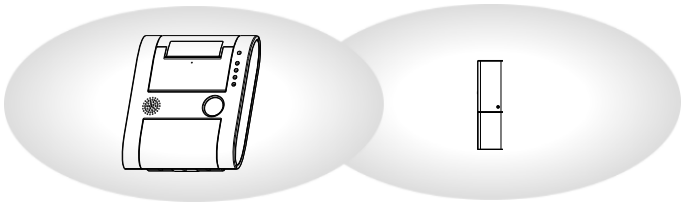
UNDERSTANDING YOUR WIRELESS SECURITY SYSTEM

The wireless security system is ideal for labor-intensive installations but wireless also has limitations. And, like hardwired systems, requires skill to install effectively.
The wireless systems consist of a receiver (control console) and one or more transmitters (sensor detectors). The transmitters alert the receiver when conditions change at a protected area. The system integrity depends on the ability of the signal to reach the receiver. Usually transmission problems are caused by: Lack of range, Blocked or absorbed transmission, and Null spots. Let's take a look at each situation:

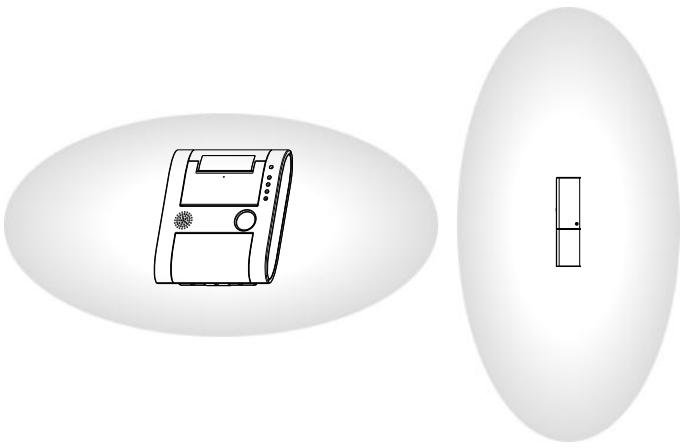
LACK OF RANGE
Radio-waves travel outward like rings on the water. But they are not limited to a flat surface. Instead, they are three-dimensional. The transmission patterns are shaped somewhat like a donut with the hole filled in. The receiver has a similar reception pattern. These patterns have implications for locating equipment.



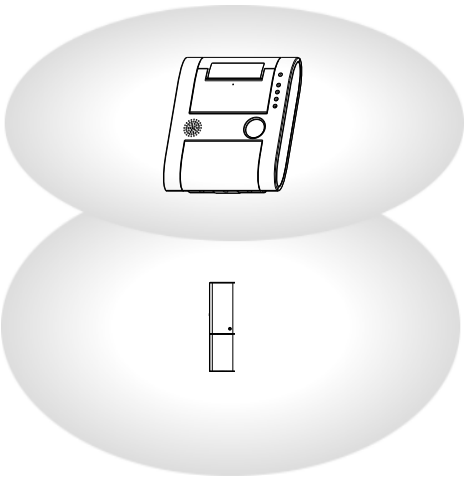
The rule: Always mount transmitters and receivers vertically for best communication.



Mounting transmitters horizontally can disorient the antennas and hamper reception

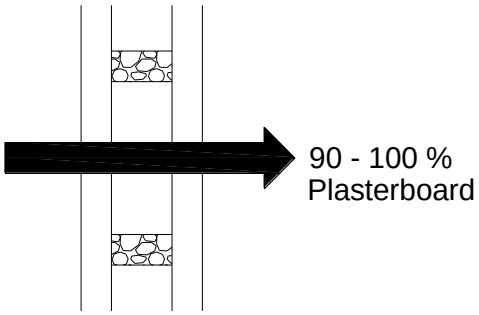


But here is an **exception** to the rule: The reception pattern is weaker directly above and below the receiver. You can improve communication by mounting transmitters horizontally when working in those areas. This causes more patterns to fall directly on the receiver.

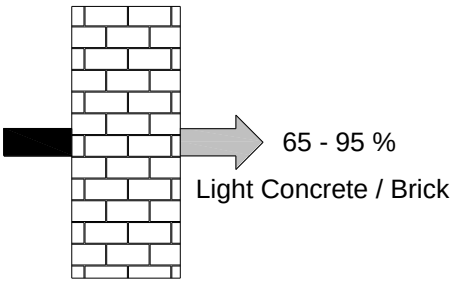


BLOCKED AND ABSORBED SIGNALS
Radio-waves pass through building materials with varying success.

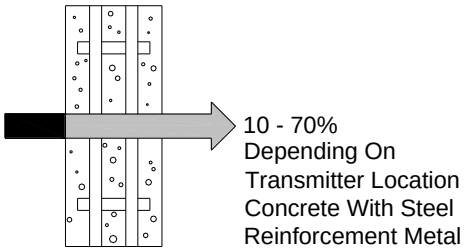
Plasterboard and wood scarcely affect transmissions. Nearly 95 to 100% of the signal will pass through.



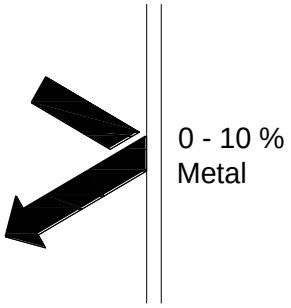
Light concrete and masonry construction will absorb portions of the signal - 65 to 95% of the signal will pass through.



Concrete with steel reinforcement will have a pronounced effect, and only 10 to 70% of the signal will get through, depending on transmitter placement.



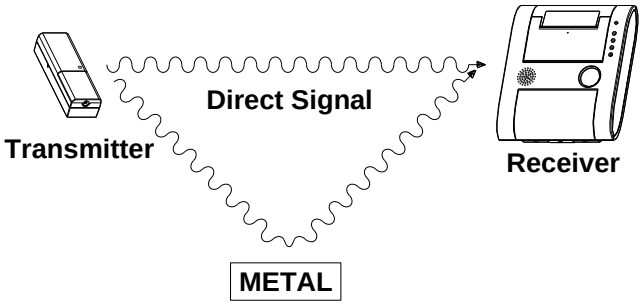
Metals have an adverse affect on wireless transmissions. Metal foils, lathe, and siding contain transmissions, and reflect them like light off mirror.



These reflected signals could further complicate reception by causing “Null spots”.

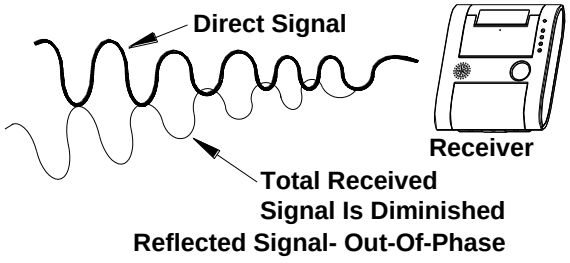
NULL SPOTS

Reflected signals can enhance or inhibit communication. These signals may still reach the receiver. But, because they take a different route, they arrive later. Depending on whether or not they arrive in-phase with the direct transmission determines reception quality.

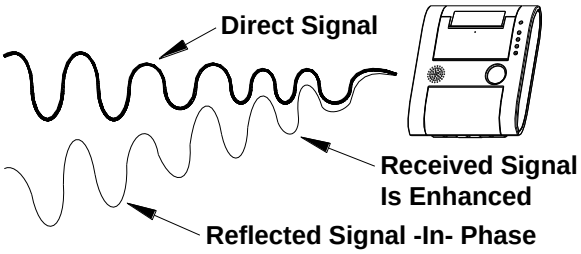


Metal objects can reflect signals so that they arrive at the receiver via different routes.

When the reflected signal arrives out-of-phase, because the peaks and troughs of the waves offset each other, the receiver doesn‘t see any signal. This is called a **null spot**.



When the reflected signal arrives in-phase with the direct transmission, it adds to and thus improve signal strength. Usually, moving a transmitter a little bit distance, you can put the waves in-phase, and improve reception.



SITE EVALUATION AND PRE-TEST

With the variables of range, signal blockage and reflection, and null spots in mind, you are ready to evaluate a site for wireless by pre-testing the system integration.

To pre-test, temporarily tape up all transmitters and receivers in place. **DO NOT** pre-test by holding a transmitter in your hand -your body‘s capacitance will affect transmission.

With the system temporarily taped in place, check performance. When the performance doesn‘t go right, checking the coding and the battery for the transmitters. If both are OK, the signal is either being blocked, out of range, or the transmitter is in a null spot. Because wave patterns are unpredictable, **the best first action is moving the transmitter a little bit in any direction**. It can be guess work, but you are improving the way reflected and blocked signals arrive.

As a last resort, the **receiver may have to be relocated** to a position more central to all transmitters. If unpractical to move the receiver, **an external antenna can be added** to position the reception point centrally to the transmitters.

In the case of several remote transmitters, **a repeater arrangement may be helpful.** A wireless repeater is a receiver/transmitter combination placed within receiving distance of remote transmitters that are too far away to transmit to a desired location.

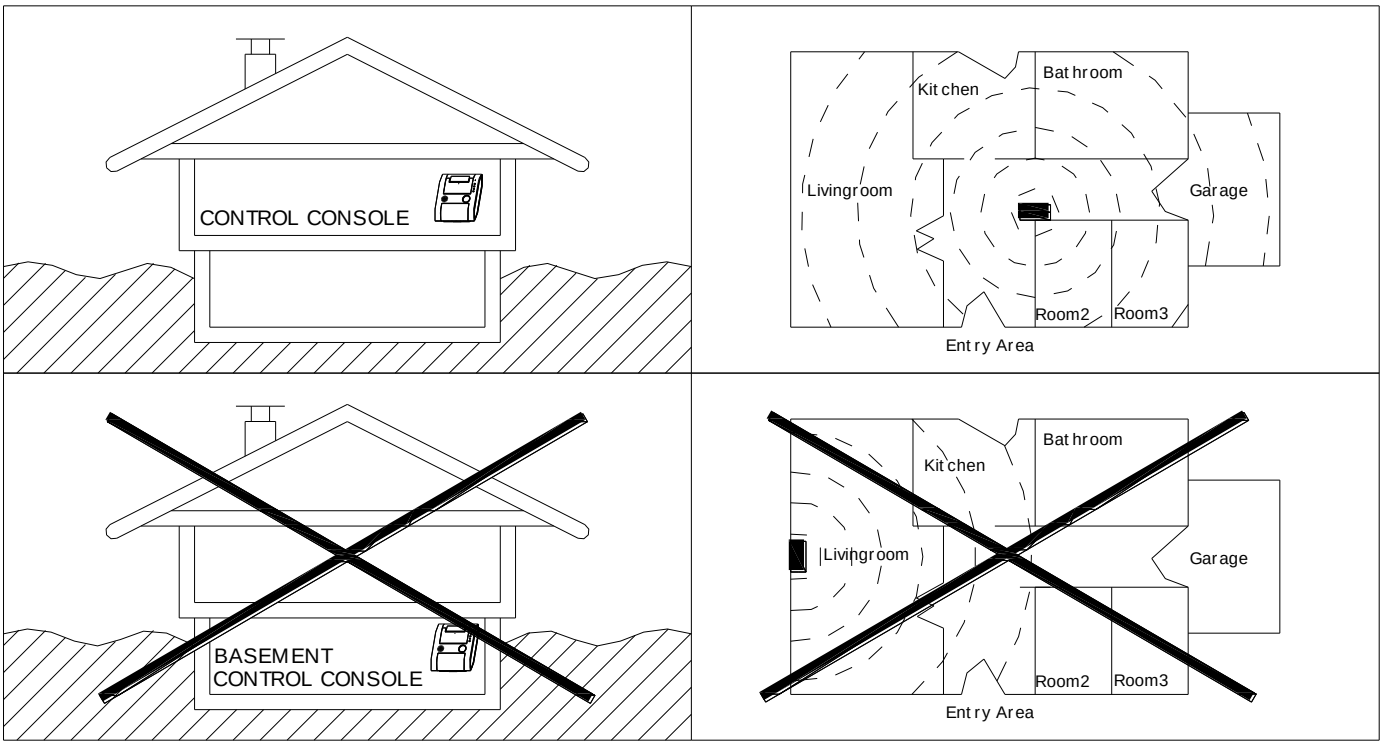
Wireless Control Console **Gamma 7**

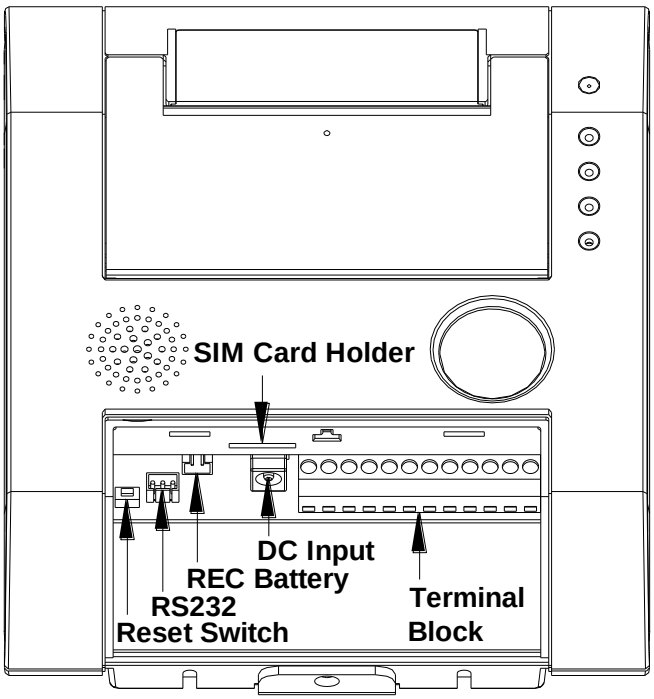
UNDERSTANDING YOUR WIRELESS CONTROL CONSOLE

Congratulations on your purchase of the **Gamma 7** Wireless Security System. You have made a wise decision in choosing it, for the **Gamma 7** offers the highest level of security and versatility but also the ease-to-use.
The **Gamma 7** is a **30 wireless channel** plus 4**-hardwired zone supervised** security system, designed for professional – residential and commercial – use.
The system status, including programming process, operation details, event/memory checking, etc., is clearly indicated from the **16x2 LCD Display** with plain language.
Up to 18 RF/4 Wired sensors and 12 operation devices can be programmed to set up the full-protection system.
The supervised transmitters provide **5 hour** status report as well as alarm reports.
The **Gamma 7** system is equipped with the superior **FSK technology** module and allows **250 meters** RF communication range in open space at 20 degree C.
In the event of an alarm, the **Gamma 7** can **call up to 8** persons, by sending the voice and the SMS messages, via the **GSM** telephone network.
In addition, the called party can, through the built-in **Hands-free Two-way** communication facility, to communicate with the persons in site, in order to determine which further action needed to be taken.
Passwords The system has 2 types of access/control passwords, these are 1234 for general use and 135246 for installation setup mode. Do not give the installation password to anyone but the person who is to program the alarm system. Misuse of this password can cause issues and problems.

MOUNTING YOUR WIRELESS CONTROL CONSOLE

When mounting your control console consider the following:
- **DO** mount the control console at least 1.5 meter (5 feet) off the floor to maximize range.
- **DO** always mount the control console vertically.
- **DO** mount the control console on a first or second floor. Never the basement**.**
- **DO** locate the control console centrally to transmitters.
- **DO NOT** mount the control console on metal surfaces.
- **DO NOT** place the control console behind large metallic objects. Try to give transmitters a metal-free line of sight.
- **DO NOT** run wiring loops tightly around the control console; they may interfere with reception.





Note: Please make sure to disconnect all power inputs, including the back-up battery, before taking apart the front cover for necessary technical checking.

[SIM CARD HOLDER]
To insert the SIM Card for GSM communication purpose.

MANUAL RESET SWITCH [RESET]
If an unexpected alarm is caused during the installation, press this button once to stop the alarm and reset the control console back to the power-on status. In addition, use this button, with [*] and [#] buttons, when proceeding the default process.

[RS232]
for factory use only (for downloading and uploading via RS232 communication).

[REC BATTERY]
To connect a 7.2V 0.7AH rechargeable battery pack for the back-up purpose.

DC POWER INPUT
The power supply of 9VDC 1.3A should be plugged into the DC socket, or connected to these 2 terminals, for the control console operation.

TERMINAL BLOCKS

WIRED BURGLARY INPUT (CH1 & GND)
Accepts the N.C. or N.O. type pulse input from the externally connected burglary sensors for wired Burglary Zone protection purpose. [See section **1-6-1**]

COMMON CONNECTION (GND)
A common connection point is provided for wiring connection purpose.

WIRED FIRE SENSOR INPUT (GND & CH2)
Accepts the N.C. or N.O. type pulse input from the externally connected burglary sensors for wired Fire Zone protection purpose. [See section **1-6-2**]

WIRED PANIC INPUT (CH3 & GND)
Accepts the N.C. or N.O. type pulse input from the externally connected burglary sensors for wired Panic Zone protection purpose. [See section **1-6-3**]

COMMON CONNECTION (GND)
A common connection point is provided for wiring connection purpose.

WIRED MEDICAL INPUT (GND & CH4)
Accepts the N.C. or N.O. type pulse input from the externally connected burglary sensors for wired Medical Zone protection purpose. [See section **1-6-4**]

REMOTE ARM/DISARM SWITCH INPUT [RST]
When a momentary pulse (i.e. more than 0.3 second) is activated with the connected switch, the system can be armed the AWAY mode, and be disarmed alternatively..

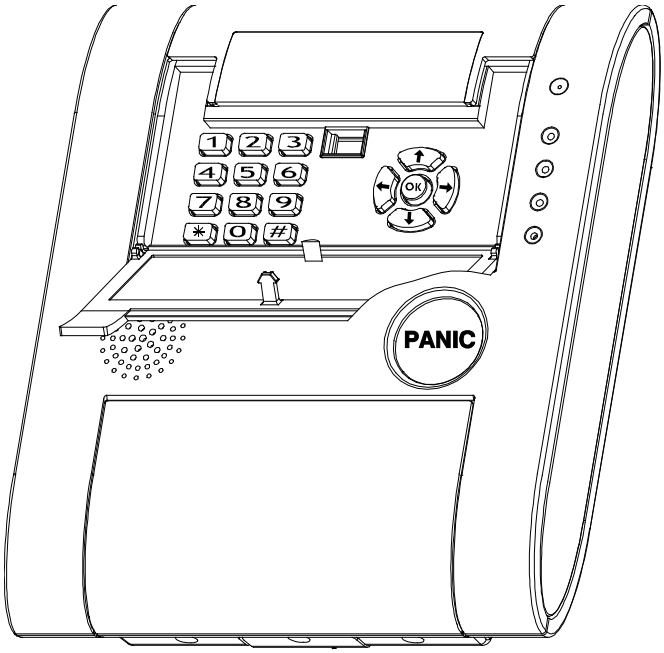
COMMON CONNECTION (GND)
A common connection point is provided for wiring connection purpose.

RELAY OUTPUT (RELAY)
A 1A relay output is provided for the ALARM WARNING or for the REMOTE SETTING, depending on the purpose selected. [See section **1-7**]

CONTINUOUS DC POWER OUTPUT (DC OUT)
A regulated +12VDC 500mA power output can be supplied for the general purpose, like the externally connected detectors and sensors that require the non-stop operation.

PROGRAMMING YOUR CONTROL CONSOLE

DESCRIPRION OF OPERATION BUTTONS

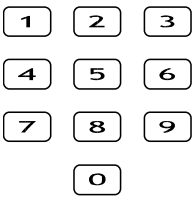


0 LCD DISPLAY

The LCD Display shows all the messages during Programming and Operation stages.

If any **Faulty Status** is happened on the control console, like tamper open, and/or the sensors, like door open, etc, the LCD Display will become blank as being the warning signal.

1 DIGIT-1 to DIGIT-0 BUTTONS



Use these buttons to enter the digit.

2 ASTERISK BUTTON

Press this button to exit the current programming option and either to continue the next option or back to previous option during the Programming Mode.
Press this button and # simultaneously to engage and to stop the Not Activate supervision function.

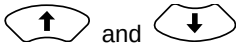
3 HASH BUTTON

Press this button to erase the wrong digit entry.
Press this button and * simultaneously to engage and to stop the Not Activate supervision function.

4 OK BUTTON

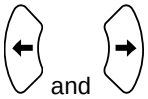
Press this button to confirm the data entry for programming and operation.

5 UP and DOWN BUTTONS



Use these buttons to select the programming options required.

6 LEFT and RIGHT BUTTONS



Use these buttons to select the position of data entry when programming the **DATE and TIME**.

7 PANIC BUTTON

Press this button when in Emergency situation to activate PANIC Alarm.
This Button stays lit on during the PANIC Alarm period.

8) Arm/Disarm from control panel – To arm the alarm from the control panel please press 1234 and then press 1 to away arm the alarm, 2 to home arm the alarm or 0 to disarm the alarm.

POWER-UP AND DEFAULT SETTING

A. Power-up the Control Console

After plugging the power adaptor in the first time, the Control Console shows the Version Number of the **Main Software** on the LCD Display screen:

VERSION NO. 1.08 SERIAL #09600003	Within 10 seconds, the Control Console sounds 1 long beep to indicate the **Power-Up Setting** is ready.
DECODER VER : 1.10X	Then the LCD Display screen shows the Version Number of the **Decoder Software:**
01 / 01 / 01 01:01	Then it will indicate the Control Console is ready for **Initial Setting**.
SIM CARD ERROR	**NOTE:** If no SIM Card, or faulty SIM Card, is inserted, the LCD Display screen shows the message of [SIM CARD ERROR] Please check the SIM Card immediately to ensure the sound communication in case of emergency needs

B. Return to default settings

If the **Default Setting** is required, power on the Control Console, or press the RESET BUTTON once, and keep pressing the [*] and [#] buttons simultaneously until the following message shown on the LCD Display screen:

VER 1.01 DEFAULT . . .	Then, the LCD Display screen keeps showing the following message one by one:
Decoder VER : 1.01A	and
01 / 01 / 01 01:01	to indicate the Control Console is ready for next **Initial Setting**

OPTION PROGRAMMING AND SETTING

01 / 01 / 01 01:01 GAMMA 7	To start Programming and Setting, ☞ [OK]
ENTER MASTERCODE	☞ 1 to 6-digit valid Master Code. Or, factory preset Master Code is **1234**. **Note:** Press [*] button any time to leave the Programming mode and the Control Console will return to the OFF mode.

→CONTROL CONSOLE SET DATE & TIME	☞ [OK] (See section **1** for details) ☞ [↓] or [↑] to select other option.
CONTROL CONSOLE →SET DATE & TIME	☞ [OK] (See section **2** for details) ☞ [↓] or [↑] to select other option.
→SET PHONE LINES RECORD MESSAGES	☞ [OK] (See section **3** for details) ☞ [↓] or [↑] to select other option.
SET PHONE LINES →RECORD MESSAGES	☞ [OK] (See section **4** for details) ☞ [↓] or [↑] to select other option.
→SET SMS MESSAGE SET LCD CONTRAS	☞ [OK] (See section **5** for details) ☞ [↓] or [↑] to select other option.
SET SMS MESSAGE →SET LCD CONTRAS	☞ [OK] (See section **6** for details) ☞ [↓] or [↑] to select other option.
→PROCEED TESTING EXIT SET MODE	☞ [OK] (See section **7** for details) ☞ [↓] or [↑] to select other option.
PROCEED TESTING →EXIT SET MODE	☞ [OK] to complete Programming mode ☞ [↓] or [↑] to select other option.
01 / 01 / 01 01:01	Stand-by Mode screen.

1. Configure Sensors with Control Console

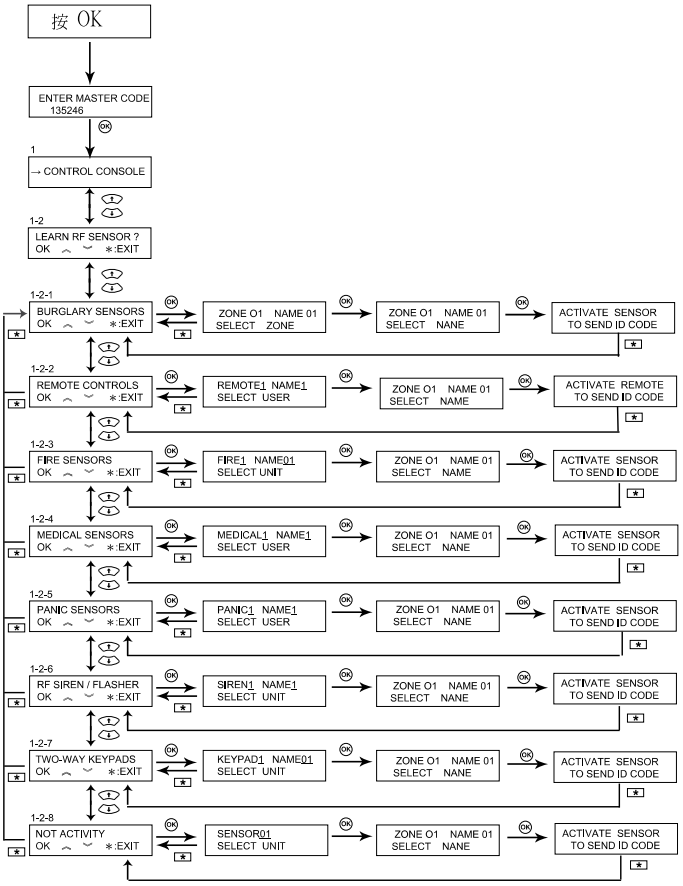
ENTER MASTERCODE	☞ the valid Master Code
→CONTROL CONSOLE SET DATE & TIME	☞ [OK] to continue this option ☞ [↓] or [↑] to select other option ☞ [*] to back to previous option

1-1. SET New Master Code

SET CODE ? OK ∧ ∨ ∗:EXIT	☞ [OK] to continue this option
INSTALL CODE ? OK ∗:EXIT	☞ [OK] to continue this option ☞ [↓] or [↑] to select other option ☞ [*] to back to previous option

NEW INSTL CODE 1-6 號新密碼	☞ 1 to 6-digit new Master Code.
NEW INSTL CODE OK ＊:EXIT	☞ ⓞⓚ to confirm New Master Code entered.

1-2 LEARN RF Sensors



A.The unique **ID CODE** of each RF Sensor/Device for **Learning** purpose, is available by pushing the **Tamper Switch** of the unit except of the **Remote Control**. To send the ID Code of the Remote Control is to push the **AWAY** and **HOME** buttons simultaneously

If the different sensor ID Code is learned into the same Zone Number, the previously learned ID Code shall be removed, and thus the new sensor becomes the working unit.

B.Total **30** pieces of RF Sensors/Devices can be learned in each Main Console, including:

10 pieces Burglary Sensors [See section **1-2-1**],
8 pieces Remote Controls [See section **1-2-2**],
4 pieces Fire Sensors [See section **1-2-3**],
2 pieces Medical Sensors [See section **1-2-4**],
2 pieces Panic Buttons [See section **1-2-5**],
2 pieces RF Siren/Flashers [See section **1-2-6**],
2 pieces 2 Way Keypads [See section **1-2-7**],
There are **10** pieces additional sensor for Not Activate Sensors [See section **1-2-8**].

C.(1) When the number of Zone Name is entered, the preset Zone Name will be shown on the second line of LCD Display accordingly.

The preset **Zone Names 01-19** are:

0 1 Front Door	11 Guest Room
02 Garage	12 Master Bed Room
03 Garage Door	13 Laundry Room
04 Back Door	14 Basement
05 Child Room	15 Attic
06 Office	16 Den
07 Dining Room	17 Yard
08 Kitchen	18 Hall
09 Living Room	19 Utility Room
10 Bed Room	20-22 Custom Zone

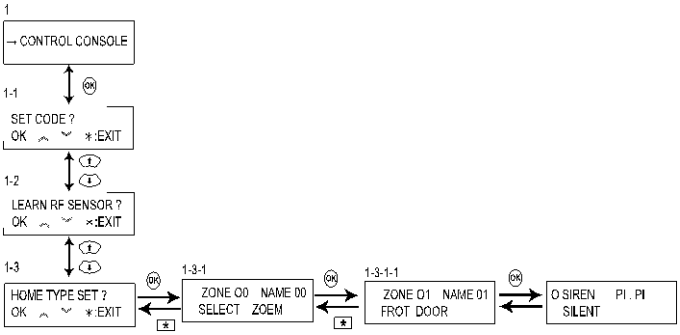
(2) Zone Names 20-22 are the zones with the user-recorded Voice Indication of Custom Zones 20-22

(3) User Names 1-8are the 8 user-recorded (i.e. voice indication) User Names.

D. Active the Sensor and transmit its ID Code to the Control Console. Upon receipt and acknowledging the ID Code, the Control Console sounds a confirmation beep tone.

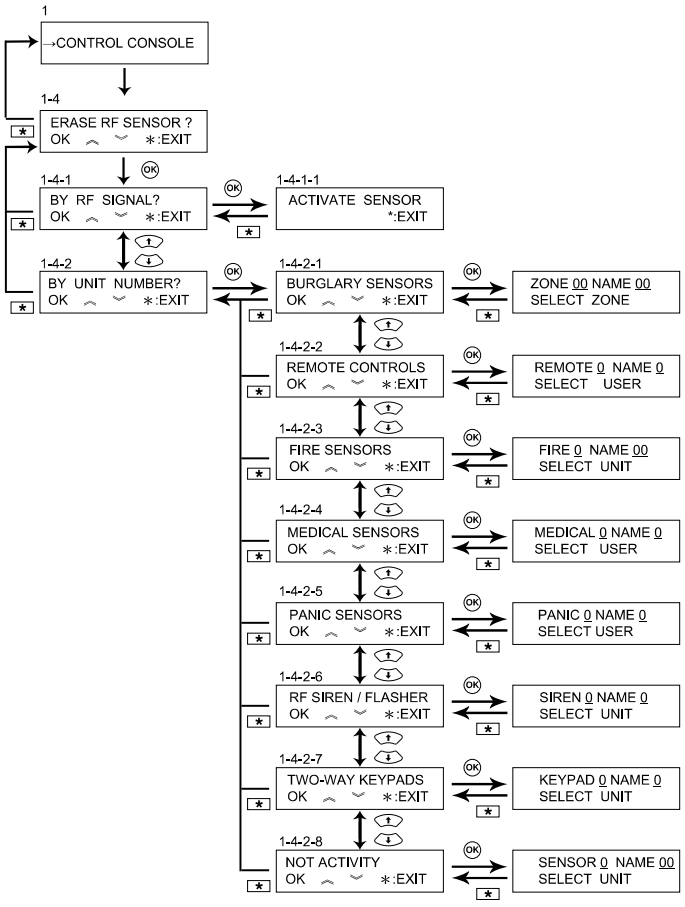
E). Home Arm Sensors - Sensors you wish to setup in home arm mode must be installed in zones 16 – 20. Sensors within these zones will NOT be active when you press the home arm mode button on the key fob, or home arm mode from the keypad. This means you can walk past these PIR and they will not trigger the alarm system or open and close windows and doors and they wont trigger the alarm.

1-3 SET Siren in Home Mode



Note: You can self-select which areas are triggered when the sensor is to be issued a voice. (Not including the 24-hours surveillance wireless sensor)

1-4 Erase RF Sensors



A. BY RF SIGNAL

Activate the RF sensor and transmit its ID Code to the Control Console. Upon receipt and acknowledging the ID Code, the Control Console will sound a 5 short beeps confirmation tone.

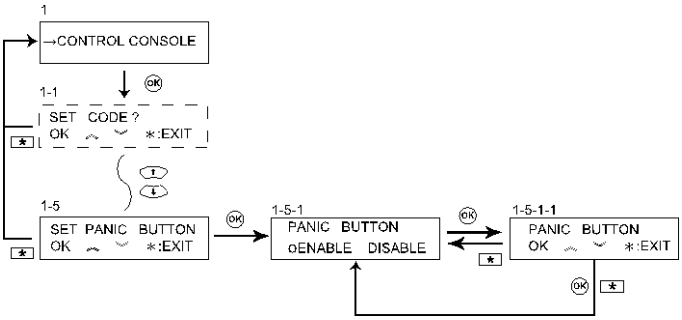
The unique **ID CODE** of each RF Sensor/Device for **Erasure** purpose is available by triggering the unit except of the **Remote Control**. To send the ID Code of the Remote Control is to push the **AWAY** and **HOME** buttons simultaneously.

B. BY UNIT NUMBER

The LCD Display screen shows the concerned **Zone Name /User Name** automatically.

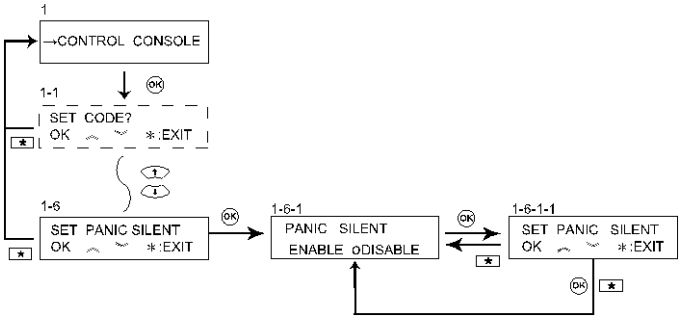
Press (OK) to confirm the erasure of the selected Unit. The Control Console will sound a confirmation beep tone.

1-5 SET Availability of Panic Button



Note: To decide if the big red Panic Button is available as being an Emergency Button or not

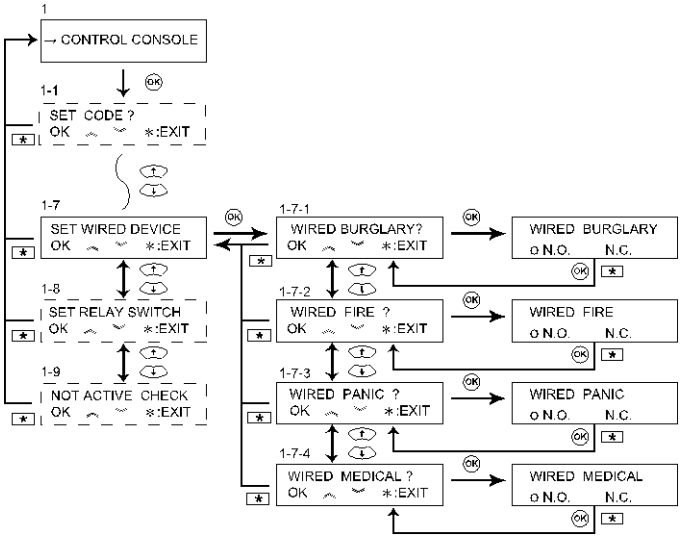
1-6 SET Silent Panic Alarm



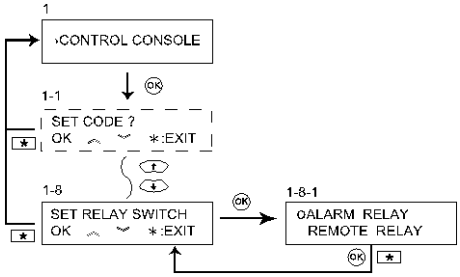
Note: To select **Type of Panic Alarm from Remote Control** concerned.

When set the **Silent Panic Alarm**, only the Telephone Dialing Output is available.

1-7 Learn Wired Devices



1-8. SET Relay Output

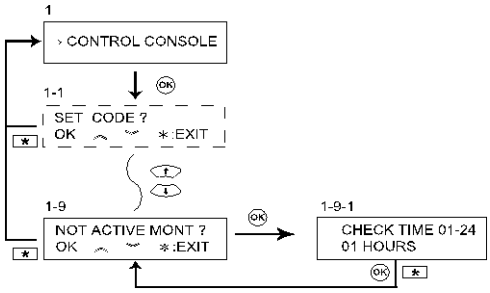


Note: There are two kinds of purpose of Relay Output available:

- **Alarm Relay** means the relay output is managed by the ALARM condition and is used to activate the warning devices..
- **Remote Relay** means this relay output is controlled by the remote site, via telephone communication, and is used to activate certain specific devices, like home automation units, etc.

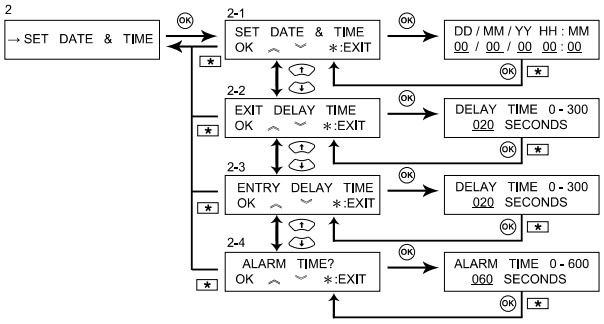
Remarks: To activate, enter command **∗01##** after get into the Remote Programming Mode; to deactivate, enter **∗02##**

1-9 SET Period for Not-Active Mode



Note: This is the time period to check if any "life sign" can be detected by the Not Active sensors. Entry of 01-24 means the time period of 1-24 hours.

2. SET Date and Time



2-1. SET Date and Time

☞ the date and time in the sequence of year (i.e. last 2 digits of the year) – month (i.e. order of the month in 2-digit format) – date (i.e. in 2-digit format) – hour (i.e. in 24-hour system) – minute.

2-2. Set Exit Delay Time

☞ **Exit Delay Time** in 3-digit (i.e. 300 seconds maximum) format.

2-3. Set Entry Delay Time

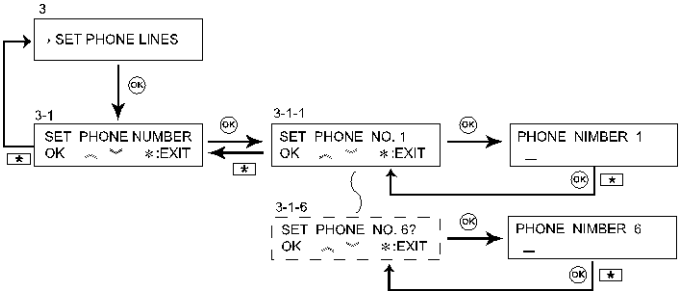
☞ **Entry Delay Time** in 3-digit (i.e. 300 seconds maximum) format.

2-4. Set Alarm Time

☞ **Alarm Time** in 3-digit (i.e. 600 seconds maximum) format.

3. SET Telephone Lines

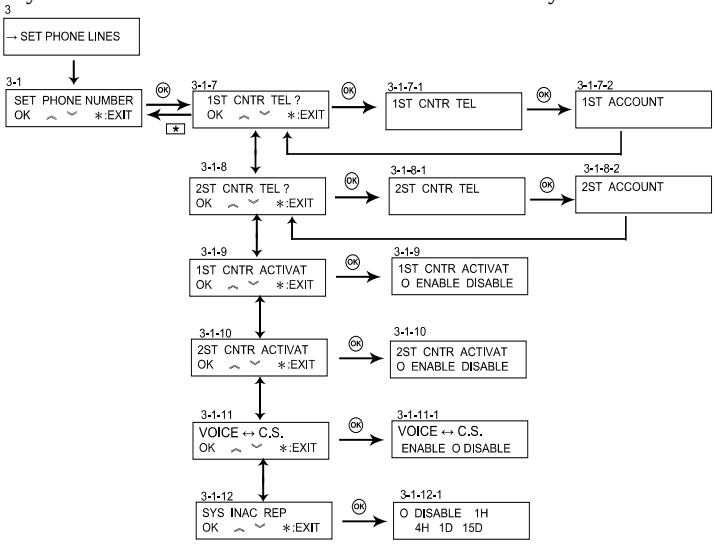
3-1 Telephone Numbers



The alarm system can call up to 6 telephone numbers with either voice or SMS notifications. Please make sure to enter all digits required, such as for PABX systems and, for long distance calls, etc.

3-1-7~3-1-12 CMS Number and Setting

Please note we do not support call center monitoring so do not enter any information in this section as it will cause issues for you

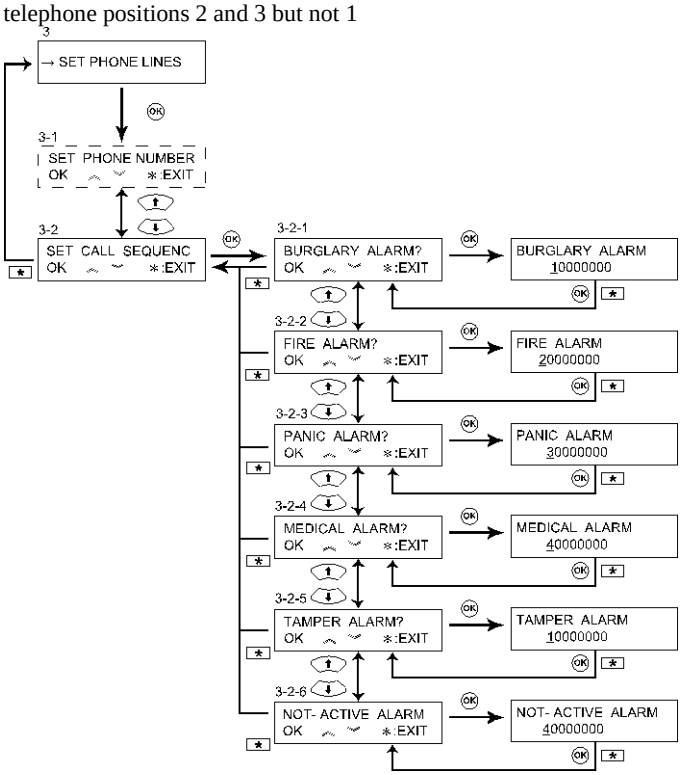


3-1-7 ~ 8 for the control center telephone set
3-1-9 ~ 10 as to whether opening up control center
3-1-11 SET two-way communication with the control center
3-1-12 SET control center system failure report time

3-2. SET Telephone Call Out Sequence

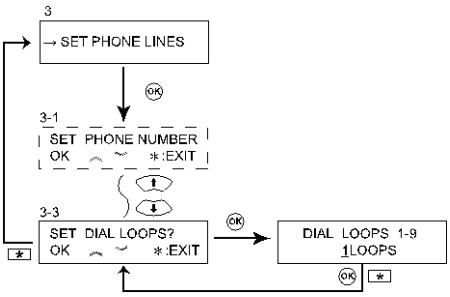
This is a very important part of the setup of your alarm system as it is here that you select which activations of the alarm (panic/burglary/fire) system call which people/phones. For instance you may want telephone position 1, 2 and 3 to get contacted if there is a fire or burglary, but you do not want them to get contacted if the panic button is pressed. You will see below that the default setting for burglary is to call position 1 only (100000) if you want position 2 and 3 to also receive contact from the alarm please change this to be 123000, this now means that when the alarm is activated it will call 1-2-3 for a burglary activation. If you only want position 2 and 3 to

get called when there is a panic activation, instead of selecting burglary from the drop down list please select panic and in panic change the default setting from 300000 to show 230000, this now means that when the panic button is pressed the alarm will contact telephone positions 2 and 3 but not 1

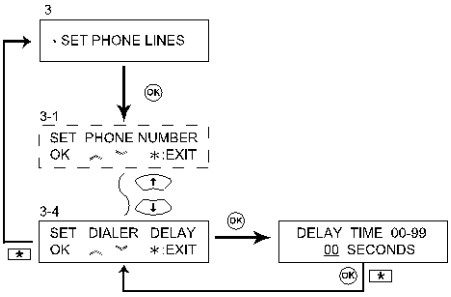


Note: **Call out sequence** means the order of which the telephone numbers to be called for sending the concerned alarm message will be contacted. Telephone numbers can be dialed more than once and the actual called numbers are determined by the option of **Dialing Loops**. [See section **3-3**.]

3-3. SET Dialing Loops

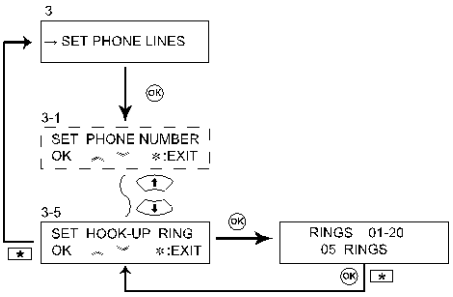


3-4. Delayed Dialing Time



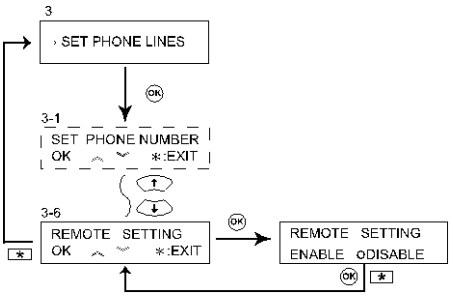
Delayed Dialing Time in 2-digit (i.e. maximum 99 seconds) format. **Note**: If the Delayed Dialing time is selected, the dialing process shall be engaged **1-99 Seconds** after the burglary alarm happened.

3-5. Rings before Hook-up

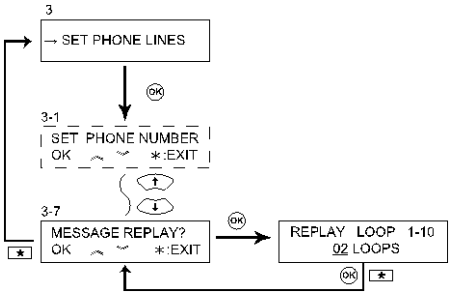


Numbers of ring before Hook-up for next phone number dial.

3-6. Availability of Remote Setting



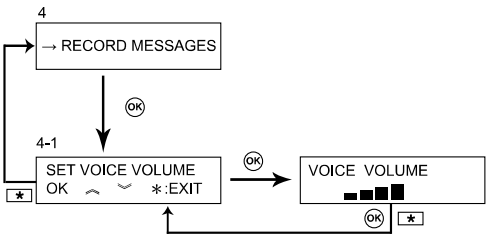
3-7. Message Replay Times



Numbers of time for each alarm message replay / loop: in 2-digit (i.e. 10 replays/loops maximum)

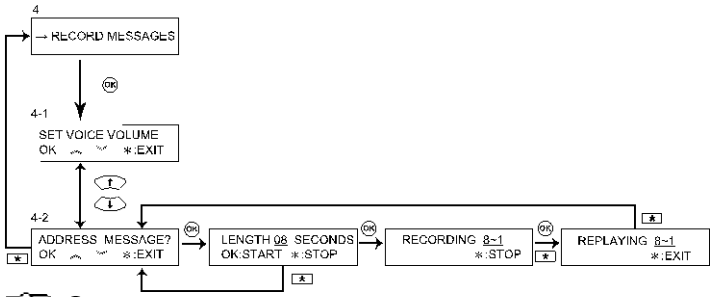
4. Record Messages

4-1 Volume of Voice Message



☞ use ⟵ or ⟶ to set the volumn.

4-2. Address Message

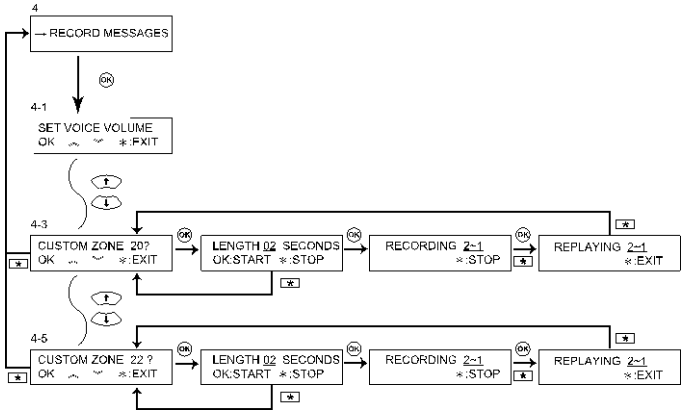


☞ OK to start. to record voice message of site address, etc. **8 seconds** maximum.

When the recording is being made, a countdown timer on LCD Display will indicate the remaining recording time

After the recording is stopped, the recorded message will be replayed automatically to make sure the recording is completed.

4-3.~4.5 Custom Zone Name 20~22

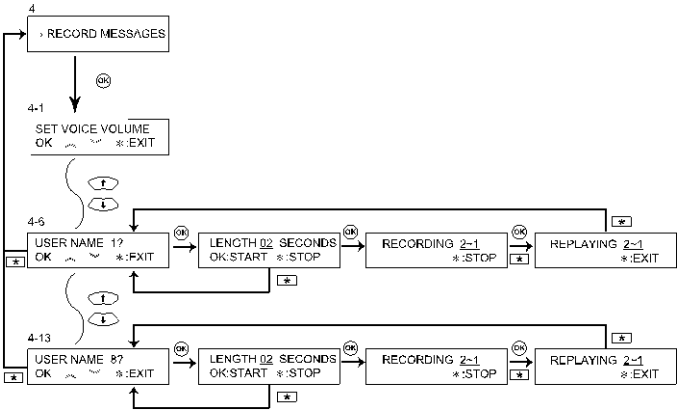


PRESS OK to start. to record voice message of Custom Zone Name **2 seconds** maximum.

When the recording is being made, a countdown timer on LCD Display will indicate the remaining recording time

After the recording is stopped, the recorded message will be replayed automatically to make sure the recording is completed.

4.6 ~ 4.13 Record User Name 1~8



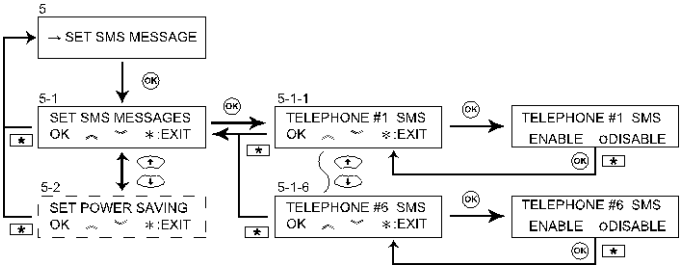
PRESS OK to record the message of User Name. **2 seconds** maximum. When the record is being made, a countdown timer on LCD Display will indicate the remaining recording time

After the recording is stopped, the recorded message will be replayed automatically to make sure the recording is completed.

5. SET SMS Messages

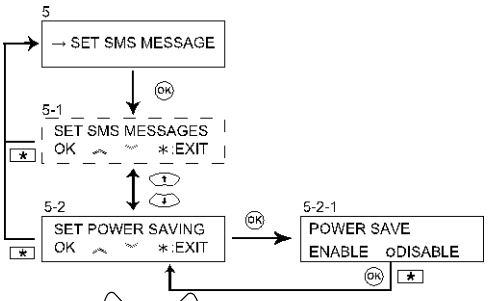
It is here that you decide who gets an SMS notification and who get a voice notification, please see below how to set this

5-1. SMS Messages



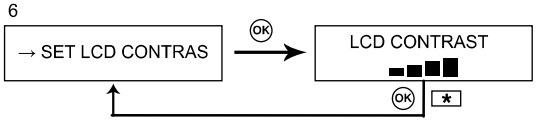
PRESS ⟵ or ⟶ to select **Availability of SMS Message sent to Telephone Number 1~6**, then press OK to confirm.

5-2. Availability of Power Saving Mode



PRESS ⟵ or ⟶ to select **Availability of Power Saving Mode** required, then OK to confirm Availability of Power Saving Mode to selected.

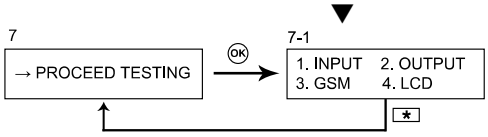
6. SET LCD Contrast



PRESS ← or → to set **LCD Contrast** required.

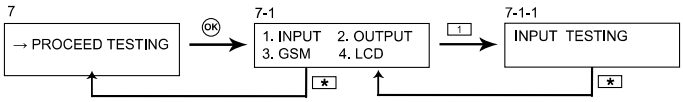
PRESS OK to confirm LCD Contrast selected.

7. Proceed Testing



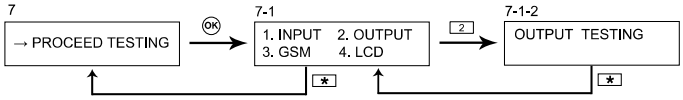
☞ 1 to proceed Input Testing.
☞ 2 to proceed Output Testing.
☞ 3 to proceed GSM Module Testing.
☞ 4 to proceed LCD Module Testing.

7-1. Input Testing



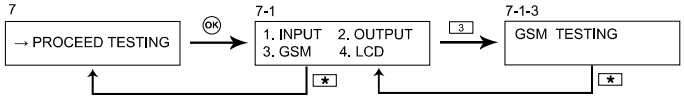
☞ activate the RF and Hardwired Sensors/Devices from the location.
Upon receipt and acknowledging the ID Code of the RF Sensors/Devices and the triggering signal of the H/W Sensors/Devices, the Control Console will sound a confirmation beep tone and the LCD display shows the RF strength to indicate the Sensors/Devices being tested are in good condition.

7-2. Output Testing



In **Output Test Mode**, the Control Console will self-test and confirm all its and connected outputs work OK. After completing the output test, the Control Console will exit the Output Test mode automatically and back to the previous option.

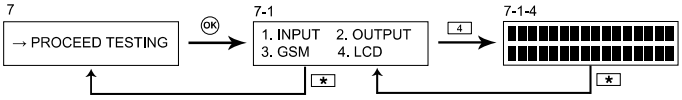
7-3. GSM Module Testing



☞activate the RF and Hardwired Sensors/Devices from the location.

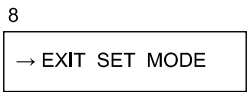
In **GSM Module Test Mode**, the Control Console will test and confirm if the inserted SIM card works fine.

7-4. LCD Module Testing



In **LCD Module Test Mode**, the Control Console will display a special image on the LCD Display screen. If all sections are to be seen black, it approves the LCD Module works OK.

8. Exit the Programming Mode



Note:

1/ If no buttons are pressed while in setup mode for 2 minutes the system will exit setup mode automatically.

2/ Before you power-up the console, please insert the GSM SIM card first. Then connect the back up battery and lastly connect the mains transformer. Otherwise, the LCD will show “SIM error” message. You also risk blowing the SIM card by shorting it out if it is powered on.

3/ If you **e**nter the wrong password three times, the host will automatically lock this system for 3 minutes, and record to the event into the event memory.

OPERATING YOUR WIRELESS SECURITY SYSTEM

1-1.AWAY ARM Mode:

This is when no one is in the house and all sensors are armed and active

01 / 01 / 01 01:01 GAMMA 7	While in **DISARM**, enter the default password 1234 and press [1] once, the System now enters away arm mode and if you have a exit delay set will start to count down.
AWAY	In the **Exit Delay** stage, the buzzer keeps sounding slow beep indication. Until the last **seconds**, a fast beep is heard to warm the user to leave the premises in time.
01 / 01 / 01 01:02 AWAY	The system then vocally states AWAY ARMED.

1-2. HOME ARM Mode: This is when you have some sensors in zones 16,17,18 and 19, these are your home arm zones, under home arm these 4 sensors will not be active, therefore you can activate them and they will not trigger the alarm, such as a PIR on a landing!

01 / 01 / 01 01:01 GAMMA 7	In disarm please enter the user password 1234 followed by pressing number 2, the system will now arm itself in home arm mode
HOME	In the **Exit Delay** stage, the buzzer keeps sounding a slow beep indication for the exit delay. In the last few seconds the beep will become fast and to let you know to leave the protected area.
01 / 01 / 01 01:02 HOME	The system then vocally states Home ARM.

1-3. Silent the Alarm and Disarm the Control Console:

01 / 01 / 01 01:02 AWAY or 01 / 01 / 01 01:02 HOME	To disarm the system please enter the user password, the default for this is 1234 then press 0 to disarm the system
01 / 01 / 01 01:02 GAMMA 7	(Back to Main menu.)

1-4 FORCE Arming: (By-pass Arming)

When you arm the Gamma7 system it will check the condition of all the sensors, this means if a door has a door contact on it and it has been left open the alarm will not arm and will for instance state “back door open” however if you know the back door is open and still want to arm the alarm just enter the command once more, so if using the key fob press arm again and the alarm will bypass this open sensor and arm the alarm. Or if using the keypad press 1 or 2 once again and it will again force arm the system and bypass this sensor.

Example: 1-2-3-4-1-1(AWAY arming)
1-2-3-4-2-2(HOME arming)

2-1. Activate the Not-Active Mode:

01 / 01 / 01 01:01 GAMMA 7	☞ [*] and [#] simultaneously, and the System gets into the Not Active Mode immediately. **Note**: It is possible to activate the Not Activate Mode no matter which (AWAY, HOME and DISARM) Mode the System is in.
01 / 01 / 01 01:01 NOT ACTIVE ON	Before activate the Not Active mode, please make sure that there must have at least one RF sensor learned for the concerned supervision purpose. Otherwise, activating the Not Active mode is not allowed.
01 / 01 / 01 01:01 GAMMA 7	(Back to Main menu.)

2-2. Deactivate the Not-Active Mode:

01 / 01 / 01 01:01 GAMMA 7	☞ [*] and [#] simultaneously.
01 / 01 / 01 01:01 NOT ACTIVE OFF	☞ [*] and [#] simultaneously.
01 / 01 / 01 01:01 GAMMA 7	(Back to Main menu.)

3-1. Activate PANIC Alarm:

01 / 01 / 01 01:01 GAMMA 7	Press the PANIC button to activate the PANIC Alarm when in emergency.
PANIC ALARM CONTROL CONSOLE	This button can be set to sound the siren or be silent

3-2. Silent the PANIC Alarm:

PANIC TRIGGLE MAIN CONSOLE	To silent the panic alarm please enter the user password, the default for this is 1234 then press 0 to disarm the system

	(Back to Main menu.)

4. Check the Event Memory

01 / 01 / 01 01:01 GAMMA 7	In DISARM Mode, press ← and the System enters the **Event Memory Displaying** mode. The LCD Display shows the last event kept in the memory data-bank.
001 01 / 01 / 01 01:05 SYSTEM DISARMED	☞ ↓ or ↑ to display the memorized events one by one.
002 01 / 01 / 01 01:02 BURGLARY ALARM	Then, ☞ (OK) to view the details of event.
ZONE01 FRONT DOOR	When no further checking is required, ☞ (*) to leave the Event Memory Displaying mode and return back to DISARM mode.
	Note: Total quantity of events can be memorized is **100** maximum. If more than 100 events happened, the earliest one will be pushed out from the memory data-bank.

5. Auto-return and low-voltage notification

5-1 Sensors – every **5** hours the alarm system will test each sensor. If there is no reply from the sensor from 3 signal tests during a consecutive "16" hour time period, the host LCD will show "TX FAIL" and the sensor in questions zone number and name. This could be caused by either interference from another device in your home of the sensor is out of range. Please try relocating either the panel or the sensor, or the battery is flat.

5-2 When the voltage of host drops below to 7.2V, it will play "MAIN CONSOLE AC RESTORE" voice, and LCD will show this message too.
When the voltage drops to 6.8V, the host will play "MAIN CONSOLE BATTER EDAD" and LCD will show this message. Then the host will shut down automatically.

6. Dial-out Alarm Messages

When the alarm is armed and a sensor is activated the alarm will automatically start the auto dial process and contact the numbers you have entered into the system, this contact could be either by SMS or voice, this is unless you have edited the auto dial delay time. This can be from 01 to 99 seconds delay. If you edit this delay it will mean that should a sensor be activated and the alarm triggered, it will count down the entered time frame before starting the auto dial process.

When dialing out the Alarm Message, the Control Console dials all selected phone numbers one by one in the first round. Then, in the second, the third and up to the ninth round, only the phone numbers, which are not successfully connected in the previous round, will be re-dialed.
Note: A telephone call which can't be connected within 30 seconds is treated as a **FAILED** attempt.
Note: A telephone call which alarm message replay is not completed or acknowledged is treated as a **FAILED** attempt.
Remarks:
COMPLETE means the all required loops of the alarm message has been replayed.
ACKNOWLEDGE means the called party responds to the alarm call by pressing any digit of 0 to 9 after 1 full loop of the alarm message has been replayed.

When the called party receives the alarm call, they can either press the * button on the hand set to confirm the call was received and to stop alarm calling anyone else, or, hang up the call not press * and let the system call the next person. However someone must press * to stop the alarm, as otherwise it will keep calling all numbers until the entered loops are completed. As soon as you press the * button the internal siren will stop sounding and you enter 2 way communication. From here you can speak into the home and listen into the home. The external siren will keep sounding for its pre set time frame if you have one.
Note: During the Monitoring Mode, the called party can hang up the phone at any time then the Control Console keeps dialing the next telephone number required.

After all telephone numbers have been connected, or after the third round dialing is complete, the phone communication from the same triggering will stop completely. However if for instance a burglar is still within the home and they trigger another sensor it will start the sequence of events again.

7. Dial-in from the Remote Site

Dial the number of the SIM card within the alarm system

▼

The Control Console picks up the incoming call after the programmed Number of Rings (See section **II-3-5** for details).

▼

Enter the password (default was 1234), if entered correctly the alarm will sound BING BONG, if not correct the alarm states "error" You have 3 attempts at this, then it will disconnect the call. If you enter the password correctly you enter into the remote operation Mode.

▼

The Options available to you are as follows in the table below.

Option	Description	Entry (N)
＊01＃＃	Activate Remote Relay	
＊02＃＃	Deactivate Remote Relay	

＊03＃＃	Arm AWAY Mode	
＊04＃＃	Arm HOME Mode	
＊05＃＃	Disarm	
＊06＃＃	Activate Not-Active Mode	
＊07＃＃	Deactivate Not-Active Mode	
＊08＃＃	Engage 2-Way Communication	
＊09**N**＃＃	Set Master Code	1–6 digits
＊10**N**＃＃	Set Exit Delay Time	000-300 (sec)
＊11**N**＃＃	Set Entry Delay Time	000-300 (sec)
＊12**N**＃＃	Set Alarm Time	000-600 (sec)
＊13**N**＃＃	Set Delayed Dialing	00-99 (sec)
＊14**N**＃＃	Set Not-Active Report Period	01-24 (hours)
＊15**N**＃＃	Set Phone for SMS Message	
＊16**N**＃＃	Set Phone Number 1	1-24 digits
＊17**N**＃＃	Set Phone Number 2	1-24 digits
＊18**N**＃＃	Set Phone Number 3	1-24 digits
＊19**N**＃＃	Set Phone Number 4	1-24 digits
＊20**N**＃＃	Set Phone Number 5	1-24 digits
＊21**N**＃＃	Set Phone Number 6	1-24 digits
＊22**N**＃＃	Set Phone Number 7	1-24 digits
＊23**N**＃＃	Set Phone Number 8	1-24 digits

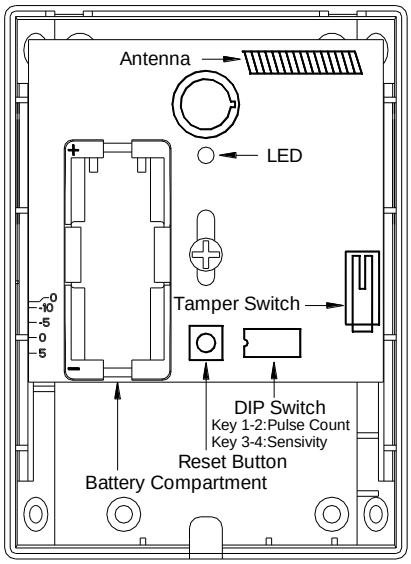
＊24**N**＃＃	Call Sequence - Burglary Alarm	1-8 digit
＊25**N**＃＃	Call Sequence - Fire Alarm	1-8 digit
＊26**N**＃＃	Call Sequence - Panic Alarm	1-8 digit
＊27**N**＃＃	Call Sequence - Medical Alarm	1-8 digit
＊28**N**＃＃	Call Sequence - Tamper Alarm	1-8 digit
＊29**N**＃＃	Call Sequence - Not-Active Alarm	1-8 digit
＊30**N**＃＃	Set Message Replay/Loop	01-10 (loops)
＊31**N**＃＃	Set Dialing Loop	1-9 (loops)
＊32**N**＃＃	Set Rings before Hook-up	01-20 (rings)
＊33**N**＃＃	Set Panic Button Availability	1 digit (0 or 1) (1: enable)
＊34**N**＃＃	Set Silent Panic Alarm	1 digit (0 or 1) (1: enable)
＊35**N**＃＃	Set Type of Wired Sensors	4 digits (0 or 1) (0: N.O; 1: N.C.)
＊36**N**＃＃	Availability of Relay Output	1 digit (0 or 1) (1: enable)
＊37**N**＃＃	Set Volume of Voice Message	1-7 (7: max)
＊38**N**＃＃	Availability of Remote Operation	1 digit (0 or 1) (1: enable)

▼

☞ **＊00＃＃** to exit the Remote Operation Mode

Passive Infrared (PIR) Transmitter

UNDERSTANDING YOUR PIR TRANSMITTER



Fitting the Battery
Unscrew and remove the front cover. Insert the 3.0VDC Lithium battery, type CR123, into the battery compartment.
Note: Please be reminded to close the front cover immediately, i.e. before the 40-second warm-up time expired, if you **DO NOT** need to proceed the code-learning and/or walking-test mode.

Warm-up Time Period

After the (new) battery is installed, a **40-second Warm-up Timer** starts and the dual-color LED keeps blinking in Red and Green. At the end of warm-up time period, the LED lights up Red twice and turns off to indicate the PIR unit is ready.

Learning the Code
Set the control console in the code-learning mode. Open and close the front cover again, or just push the tamper switch once, to activate the tamper switch to send a special ID Code for learning purpose. After this unique ID Code has been received and acknowledged, the control console will sound the confirmation beeps.
After finishing the code-learning process, you can continue the Walking Test, as explained in the following paragraph.

Selecting the Pulse Count ((DIP SW / Key 1-2)
According to the system design plan, decide which pulse count needed for each PIR detector and set the DIR Switch Key 1 & 2 to the corresponding combination listed below:

Pulse Count Number	1	2	3	4
DIP Switch Key 1-2	OFF-OFF	ON-OFF	OFF-ON	ON-ON

Note: PIR is officially triggered and transmits the alarm signal whenever the selected 1, 2, 3 or 4 pulses are detected.
Note: Factory preset pulse count number is **2 (ON-OFF)**.

Selecting the Sensitivity/Detection Range (DIP SW / Key 3-4)
According to the walking test results, decide the sensitivity/detection range required by setting the DIR Switch Key 3 & 4 to the corresponding combination listed below:

Sensitivity Level	High	Standard	Medium	Low
DIP Switch Key 3-4	OFF-OFF	ON-OFF	OFF-ON	ON-ON

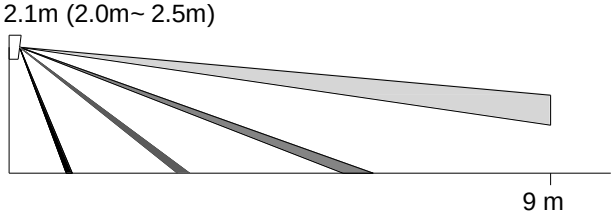
Note: Factory preset sensitivity is **Standard (ON-OFF)**.
Note: DO NOT over-select the sensitivity than needed.

Dual-color LED Indication of Battery Power Status
GREEN color indicates the Low Battery Power Warning. When the LED starts to blink slowly, it means the **Battery Power is Low** and replacing a new battery is strongly recommended. However, if the LED becomes fast blinking, it means the **Battery is Dying** and, from this point, the unit stops normal function and thus a new battery must be installed.
RED color means the unit is in data transmission with normal battery power status.

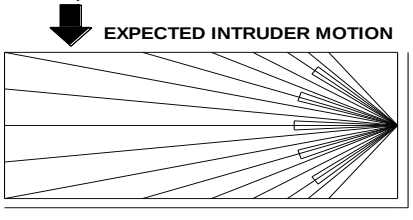
Power Saving Mode
Whenever the PIR unit is installed in the heavy traffic area, it is operated under the Power Saving mode:
After the consecutive 3 triggering, which is not longer than 3 minutes between each 2 triggering, the PIR unit starts a **30-second Sleeping Time**. During the Sleeping Time, neither transmission nor LED lit-on shall be made.
If any further triggering is detected during the Sleeping Time, an extra **30 Seconds**, corresponding to each triggering, will be added to the previous countdown timer.
The maximum length of the Sleeping Time can be accumulated is **5 Minutes**.

MOUNTING YOUR PIR TRANSMITTER

Positioning the PIR
To provide the maximum coverage, it is usually to position the PIR transmitter in a corner, about 2.1 meters off the ground and angled slightly downwards. In this position it should cover a field of around 101 degrees, when using the standard DWA (Dense Wide Angle) lens.

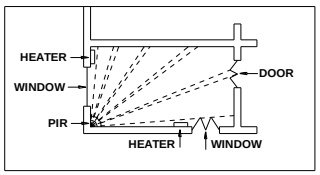


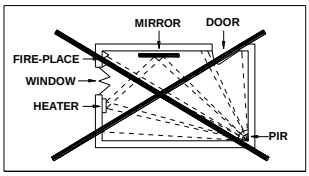
Mounting the PIR
Various screw holes have been prepared in the back of the PIR unit. It is up to you to punch out these pieces of plastic using a screwdriver. After choosing the location, the PIR unit can be secured by using the screws, and the plastic anchors, if necessary, provided. Once the PIR unit is firmly screwed into place on the wall replace the cover.



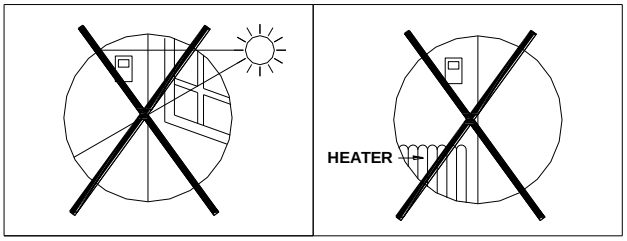
Note: DO position the PIR unit so that any intruder must cross the PIR field of view. To trigger an alarm, an intruder must cross both the positive and negative elements of one

detection pattern of the PIR unit.





Note: DO terminate each protection zone of the PIR unit on a solid object such as walls and floors whenever possible. This provides maximum detection.



Note: DO NOT aim the PIR unit at sources of rapid heating or cooling. These include forced air ducts, space heaters, direct sunlight, strong white lights and mirrors that can reflect strong lights.

WALK-TESTING YOUR PIR TRANSMITTER

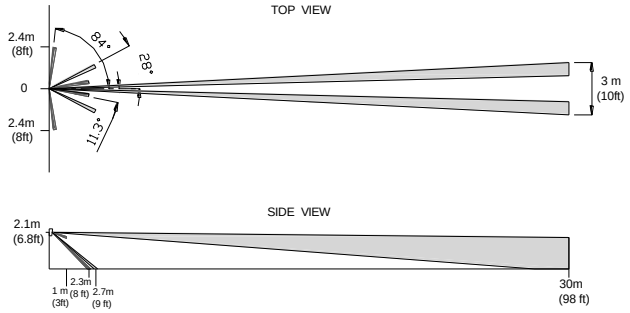
Make sure there is no animal within the detection range of the PIR. Set the control console into the input-testing mode.
Set the control console in the input-testing mode. Warm up the PIR unit first for at least 40 seconds. Open and close the front cover, or just push the tamper switch once, to start the **3-Minute Walk-Test Timer**. If additional time needed, just open and close the front cover again to extend another 3 minutes time period. During the Waling Test mode, the **Green** LED keeps blinking.
Now simulate the intruder's movements within the detection range of the PIR. Whenever the PIR unit senses the movement, the **Red** LED turns on. At the same time, the control console sounds a confirmation tone to indicate the signal has been received and acknowledged safely.
After the walking test results are satisfied, turns off the input-testing mode and just leave the PIR unit until the walk-test time expired.

Note: Always walk-test the PIR unit in the direction of likely intruder motion to verify coverage monthly.

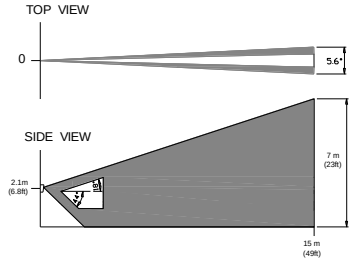
INTERCHANGING YOUR PIR TRANSMITTER'S LENSES

In addition to the standard-provided DWA (Dense Wide Angle) lens, there are also three different lenses available for the special installations, from your local dealers. They are the LR (Long Range) lens, the VB (Vertical Barrier) lens and the AA (Animal Alley) lens. When interchanging the lens, remove the lens retaining-bracket by gentle squeezing both securing tabs and pulling apart from the lens holder, and then replace with the one you choose. Walk test to find out the optimum adjustments and position for your PIR unit.

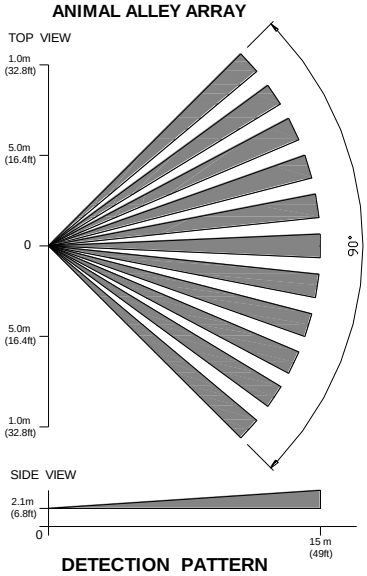
LONG RANGE ARRAY



VERTICAL BARRIER ARRAY

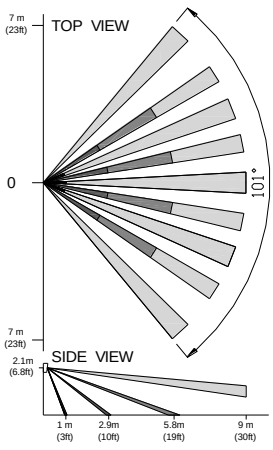


ANIMAL ALLEY ARRAY



DETECTION PATTERN

DENSE WIDE ANGLE



Door/Window Sensor Transmitter

UNDERSTANDING YOUR DOOR/WINDOW SENSOR TRANSMITTER

- ★ Lithium Battery requires minimal maintenance.
- ★ Two Reed Switches provided for versatile installation
- ★ Silicon Rubber Cover for outdoor mounting protection.
- ★ Learning Mode Technology for easy installation.
- ★ Built-in Tamper Switch alarms the console when the cover is opened.
- ★ Dual Color LED indicates the normal transmission status and the low battery power warning.
- ★ Terminal Block, with DIP switch setting, for wiring either N.C. or N.O. type external hardwire sensors.

MOUNTING YOUR DOOR/WINDOW SENSOR TRANSMITTER

Inserting the Battery
Unscrew and remove the battery cover. Insert the 3.0VDC Lithium battery, type CR2, under the silicon rubber sealing cover, into the battery compartment.
Note: Please make sure the polarity of battery before inserting the battery.

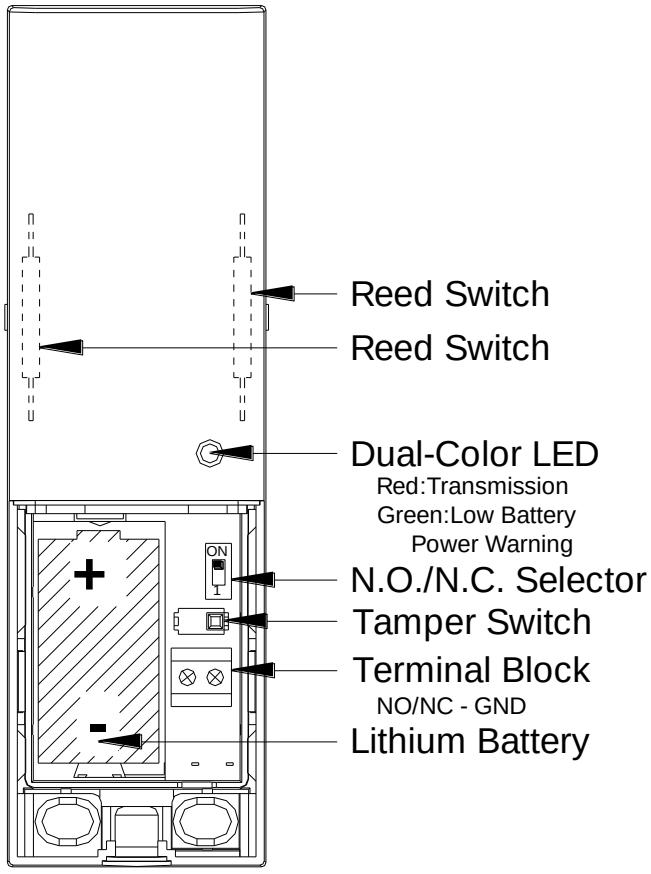
Learning the Code
Set the control console in the code-learning mode. Open and close the battery cover again, or just push the tamper switch once, to activate the tamper switch to send a special ID Code for learning purpose. After this unique ID Code has been received and acknowledged, the control console will sound the confirmation beeps.

Mounting the Magnet
Though there are two reed switches provided for versatile installation, for installation, you can only mount **ONE** magnet, according to the window or doorframe located, to each sensor. The space allowed between the magnet and the sensor is about 2.5cm in most installations.

Wiring the External Hardwire Sensors

Any hardwire sensors may be wired into the sensor/transmitter to become the wireless sensors. The concerned hardwire sensors can be either the normally closed (N.C.) or a normally open (N.O.) type. To wire the sensor to the transmitter, first select the type of sensor by setting the DIP switch, and then wire the sensor to the terminal block. Finally, mount the transmitter (and the sensor) to the location planed

Dual-color LED Indication
GREEN color indicates the Low Battery Power Warning. When it starts to blink slowly, it means the **Battery Power is Low** and replacing a new battery is strongly recommended. However, if it becomes fast blinking, it means the **Battery is Dying** and, from this point, the unit stops normal function and thus a new battery must be installed.
RED color means the unit is in data transmission status with normal battery power.



Handheld Remote Control

UNDERSTANDING YOUR HANDHELD REMOTE CONTROL

The remote control is mainly used to set the Away, Home and Off modes of the control console. It also incorporates a Panic feature, which is particularly useful if you are attacked in or around your home. In addition, during the preliminary installation stage, this remote control helps you to check weather the control console is able to receive signals from various areas of the house.

SETTING YOUR HANDHELD REMOTE CONTROL

Fitting the Batteries
Using a coin to turn counterclockwise to open and remove the battery cover. Insert a 3VDC Lithium battery, type CR2032, into the battery compartment.

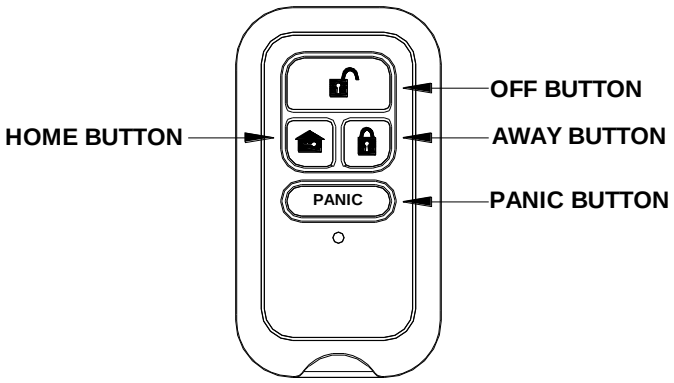
Learning the Code
Set the control console in the code-learning mode. Fit the battery in the position, close the battery cover. Press **Both the AWAY and HOME Buttons** for more than **1 second** to send its ID Code for learning purpose. When sending the ID Code, the Red LED blinks once and then turns off. After this unique ID Code has been received and acknowledged, the control console will sound the confirmation beeps.

Note: If **NO** confirmation tone is heard, it means the control console either does not receive or can not acknowledge the IC code sent from the concerned Remote Control. Please remove the battery, fit it back to re-power the Remote Control, and then proceed the Code-learning process again.

Dual-color LED Indication
GREEN color indicates the Low Battery Power Warning. When it starts to blink slowly, it means the **Battery Power is Low** and replacing a new battery is strongly recommended. However, if it becomes fast blinking, it means the **Battery is Dying** and, from this point, the unit stops normal function and thus a new battery must be installed.
RED color means the unit is in data transmission status with normal battery power.

OPERATING YOUR HANDHELD REMOTE CONTROL

Checking the Control Console Site
Set the control console in the input-test mode. Position the Remote Control at the locations where you wish to mount the D/W and PIR transmitters. Press the **OFF button**. You should hear the confirmation tone from the control console. If no confirmation tone is heard, re-position the control console a little closer to the protected points and try again. At the same time, it is worth checking any points that you may wish to protect in the future. And as an additional check, turn on any domestic appliances – like the washing machine - that may be running when your system is set. Once you are satisfied that you have found the optimum site, you should disconnect the power to the control console and proceed with installation.



Operating the AWAY/HOME/OFF Mode
When operating the control console, make sure to press and hold the selected button for at least **1 second** for the Remote Control to work properly.

Activating the Panic Alarm
When in emergency, press the PANIC Button **twice within 3 seconds**, or **once and keep for more than 3 seconds**, to summon the assistance. This feature is designed to prevent from unintentional activations.

SPECIFICARIONS

General

FR Carrier Frequency	868.35MHz (crystal-controlled)
Modulation	Frequency Shift Key (FSK) type
RF Communication Range	Up to 250 meters in open space at 25 degree C
Receiving Sensitivity	-105dBm
Transmitting Power	Less than 10mW
System ID Code	268 million combinations

Wireless Control Console

Working Power	9VDC 1.3A DC adaptor
Battery Power Supervision	7.2VDC 0.7AH rechargeable battery
Typical Battery Life	Up to 10 years in storage
Power Consumption	120mA in standby; 500mA in alarming
Operating Modes	AWAY, HOME, Off and Not-Active
Zones	18 Protection and 12 Operation units
Names	19 preset and 11 custom-recorded
Operating Code	1 Master code
Exit and Entry Delays	0 - 300 seconds
Alarm Duration	0 - 600 seconds
Relay Outputs	1 1A (120V AC/24V DC) N.O. dry contact
GSM Module	Siemens TC35i
Telephone Numbers	8 voice/SMS dialer, with maximum 24 digits each number
Voice Message	8-second custom-recorded plus 4 2-second pre-recorder alarming message
Operating Temperature	0℃ to +50℃
Dimension	190mm L x 160mm W x 45mm H

PIR Transmitter

Working Power	3.0VDC (CR123) Lithium Battery
Battery Power Supervision	2.35VDC for Low Battery Warning; 2.25VDC for Dying Battery Warning
Typical Battery Life	Up to 10 years in storage
Power Consumption	25uA in standby; 20mA in transmission
Transmitting Time	3 Seconds on each data-stream transmission
Status Supervision Report	Every 5 hours
Dual-color LED	Red – in Transmission Green – in Low Battery Power Warning
Interchangeable Lens type and Coverage	Dense Wide Angle: 9m, 101 degree sector Long Range: 30m long, 3m wide Vertical Barrier: 15m long, 7m high vertical barrier Animal Alley: 12m, 100 degree sector
Operating Temperature	-10℃ to +50℃
Dimension	108mm L x 80mm W x 46mm H

Door/Window Sensor Transmitter

Working Power	3.0VDC (CR2) Lithium Battery
Back-up Battery	2.35VDC for Low Battery Warning; 2.25VDC for Dying Battery Warning
Typical Battery Life	Up to 10 years in storage
Power Consumption	10uA in standby; 20mA in transmission
Transmitting Time	3 Seconds on each data-stream transmission
Status Supervision Report	Every 5 hours
Dual-color LED	Red – in Transmission Green – in Low Battery Power Warning
External Hardwires Inputs	Normally Open (N.O.) or Normally Closed (N.C.)
Operating Temperature	-10℃ to +50℃
Dimension	100mm L x 30mm W x 22mm H – Sensor/Transmitter 50mm L x 10mm W x 15mm H - Magnet

Handheld Remote Control

Working Power	3.0VDC (CR2032) Lithium Battery,
Battery Power Supervision	2.35VDC for Low Battery Warning; 2.25VDC for Dying Battery Warning
Typical Battery Life	Up to 10 years in storage
Power Consumption	10uA in standby; 25mA in transmission
Transmitting Time	3 Seconds on each data-stream transmission
Status Supervision Report	with Commands (Low battery warning only)
Commands	Away, Home, Off, Panic
Dual-color LED	Red – in Transmission Green – in Low Battery Power Warning
Operating Temperature	-10℃ to +50℃
Dimension	100mm L x 30mm W x 22mm H